

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave.St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-015444**Date Inspected:** 07-Jun-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

<b>CWI Name:</b>	N/A	<b>CWI Present:</b>	<b>Yes</b>	<b>No</b>			
<b>Inspected CWI report:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Rod Oven in Use:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Electrode to specification:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Weld Procedures Followed:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Qualified Welders:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Verified Joint Fit-up:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Approved Drawings:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Approved WPS:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
				<b>Delayed / Cancelled:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Bridge No:</b>	34-0006	<b>Component:</b>	Orthotropic Box Girder( OBG)				

**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Manoj Prabhune was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

This QA Inspector randomly observed the following work in progress:

OBG # TRIAL ASSEMBLY YARD

Segment # 8AE

This QA Inspector performed Dimension Inspection along with Caltrans QA Inspector Mr.Surendra Prabhu Joint Survey Inspection for the following Segment 8AE from Panel Point 61 to PP 64.5

Corner Assembly Cope Holes dimension measurements at Typical Corner Assembly Survey Location is E1~ E2, S1 ~ S4, T1 ~ T3 Cope Hole Diameter from PP 61 to 64.5 Cross Beam and Counter Weight side.

Corner Assembly Cope Holes dimension measurements at Typical Corner Assembly at Intermediate Panel Point Survey Location is E1~ E2, S1 ~ S4, T1 ~ T2 Cope Hole Diameter from PP 61 to 64.5 Cross Beam and Counter Weight side. All these details noted and forwarded to team leader for further action.

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

---

### Segment # 8BE

This QA Inspector performed Dimension Inspection along with Caltrans QA Inspector Mr.Surendra Prabhu Joint Survey Inspection for the following Segment 8BE from Panel Point 65 to PP 67.5

Corner Assembly Cope Holes dimension measurements at Typical Corner Assembly Survey Location is E1~ E2, S1 ~ S4, T1 ~ T3 Cope Hole Diameter from PP 65 to 67 Cross Beam and Counter Weight side.

Corner Assembly Cope Holes dimension measurements at Typical Corner Assembly at Intermediate Panel Point Survey Location is E1~ E2, S1 ~ S4, T1 ~ T2 Cope Hole Diameter from PP 65 to 67 Cross Beam and Counter Weight side. All these details noted and forwarded to team leader for further action.

### Segment # 8AE

This QA Inspector performed Dimension Inspection along with Caltrans QA Inspector Mr.Manjunath Math Joint Survey Inspection for the following.

Flatness measurement for Side Panel to Corner Assembly from PP 61 towards PP 62 Measurement area.  
The following locations are not complying with the contract document.

1040mm ~ 3200mm and observed flatness 5.3mm, 6.8mm, 7.5mm, 6.5mm.

4220mm ~ 4580mm and observed flatness 5.5mm, 5.6mm, 5.8mm.

Panel Point 63 towards 64

2000mm ~ 3560mm and observed flatness 5.5mm, 6.0mm.

Those locations after rectification ZPMC offer, Re-inspection after the Heat Straightening found satisfaction all these details noted and forwarded to team leader for further action.

### Segment # 8CE

This QA Inspector performed Dimension Inspection along with Caltrans QA Inspector Mr.Manjunath Math Joint Survey Inspection for the following.

Flatness measurement for Side Panel to Corner Assembly from Panel Point 68 towards PP 69

820mm ~ 2990mm and observed flatness 5.5mm ~ 6.8mm.

Those locations after rectification ZPMC offer, Re-inspection after the Heat Straightening found satisfaction all these details noted and forwarded to team leader for further action.

Segment 7DW to 7EW (T-Ribs) Caltrans QA Survey Inspection

---

## WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

---

This QA Inspector along with Caltrans QA Mr. Manjunath Math performed Individual Inspection for the T-Ribs to T-Ribs between Segment 7DW to 7EE (Shop Segment Splice) between Panel Point (PP) 58 and PP 59 North (Counter Weight Side total 19 Nos. T-Ribs) and South (Cross Beam side Total 19 Nos. T-Ribs) and at Bottom Panel (Total 18 Nos. T-Ribs) for Horizontal and Vertical Offset. The measured readings were recorded on spread sheet, generated the report and submitted to the Task Leader and Engineer for review.

Segment # 8AE ~ 8CE

This QA Inspector performed Gap Inspection along with ZPMC Joint Survey Inspection. Gap between Suspender Bracket and Deck Panel, Suspender Bracket 27mm Dia Holes. The piece Mark is identified SB62E, SB66E, SB68E, SB64W. Inspection was performed against the Notification No. 00006 Dated June 7, 2010

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 15000422372, who represents the Office of Structural Materials for your project.

---

<b>Inspected By:</b>	Prabhune, Manoj	Quality Assurance Inspector
<b>Reviewed By:</b>	Patterson, Rodney	QA Reviewer

---